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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/814,846

**Applicant(s)**

HULL ET AL.

**Examiner**

JAMES A. THOMPSON

**Art Unit**

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2008 and 25 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-7,10-29,31-39,41-53 and 56-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,10-29,31-39,41-53 and 56-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/23/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 February 2008 has been entered.

### *Response to Arguments*

2. Applicant's arguments filed 25 February 2008 have been fully considered but they are not persuasive. While Examiner does agree that the present amendments to the claims overcome the combination of references set forth in the previous office action, mailed 23 November 2007, additional prior art has been discovered which renders the presently amended claims and newly added claims obvious to one of ordinary skill in the art at the time of the invention. Accordingly, new prior art rejections are set forth below.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 18, 23, 26-27, 35, 43 and 46-47 are rejected 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) and Mastie (US Patent 6,515,756 B1).

**Regarding claim 1:** Sugiyama discloses a system for printing multimedia data (figure 1 of Sugiyama), the system comprising: an interface (figure 1(11) of Sugiyama) for receiving multimedia data from a peripheral device (column 3, lines 11-16 of Sugiyama); a multimedia processing system (figure 1 (12,15,21-25) of Sugiyama) coupled to the interface (as can clearly be seen in figure 1 of Sugiyama) to receive the multimedia data (column 3, lines 16-26 of Sugiyama), the multimedia processing system for generating an electronic representation and a printable representation of the multimedia data (column 5,

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lines 3-11 of Sugiyama) according to a predefined format specific to the peripheral device (column 3, lines 23-34 and column 5, lines 7-11 of Sugiyama – *a generated representation on a CRT monitor is different from a generated representation on a printed medium since a CRT monitor uses a set of RGB values produced over the size of a physical screen while the printer prints on a different sized medium, such as A6 sized paper; printers also generally use CMYK values, rather than RGB values, so the output format is different for this additional reason*); a first output device (figure 1(31-33) of Sugiyama) coupled to the multimedia processing system (as can be seen in figure 1 of Sugiyama), the first output device for printing the printable representation of the multimedia data to a printable tangible medium (column 5, lines 7-11 of Sugiyama); and a second output device (figure 1(18-20) of Sugiyama) coupled to the multimedia processing system (as can be seen in figure 1 of Sugiyama), the second output system for electronically outputting the electronic representation of the multimedia data (figure 4 and column 5, lines 3-7 of Sugiyama).

Sugiyama does not disclose expressly that the multimedia processing system generates the printable representation in a first format responsive to the peripheral device being a first type of peripheral device, and that the multimedia processing system generates the printable representation in a second format responsive to the peripheral device being a second type of peripheral device, the second format different from the first format.

Mastic discloses generating a printable representation in a first format responsive to the peripheral device being a first type of peripheral device, and generating a printable representation in a second format responsive to the peripheral device being a second type of peripheral device, the second format different from the first format (column 7, line 64 to column 8, line 6 of Mastic – *different formats used depending on print attribute values of printer*).

Sugiyama and Mastic are combinable because they are from the same field of endeavor, namely control and processing of document printing and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use different formats for printing depending on the type of printer connected as a peripheral device. Different printers use different default formats depending on the attributes and capabilities of each printer. Thus, one of ordinary skill in the art at the time of the invention would naturally use a first format for a first type of printer and a second format for a second type of printer since such would be needed for the proper functioning of the printers. Further, it would be obvious to use multiple different printers since different printers have different capabilities. For example, a user may wish to have a color inkjet for printing digital photographs onto photo printing paper and a black & white laser jet printer for printing documents. The color inkjet printer would provide superior

results for photographs while the black & white laserjet printer would provide superior results for documents. Therefore, it would have been obvious to combine Mastie with Sugiyama to obtain the invention as specified in claim 1.

**Regarding claim 18:** Sugiyama discloses that the interface comprises a video port (figure 1 (“Video Signal”) and column 3, lines 12-17 of Sugiyama).

**Regarding claim 35:** Sugiyama discloses a method for printing multimedia data, the method comprising: receiving multimedia data from a peripheral device (column 3, lines 11-16 of Sugiyama); determining an electronic representation and a printable representation of the multimedia data (column 5, lines 3-11 of Sugiyama) according to a predefined format specific to the peripheral device (column 3, lines 23-34 and column 5, lines 7-11 of Sugiyama – *a generated representation on a CRT monitor is different from a generated representation on a printed medium since a CRT monitor uses a set of RGB values produced over the size of a physical screen while the printer prints on a different sized medium, such as A6 sized paper; printers also generally use CMYK values, rather than RGB values, so the output format is different for this additional reason*); printing the printable representation of the multimedia data to a printable tangible medium (column 5, lines 7-11 of Sugiyama); and producing a corresponding electronic output comprising the electronic representation of the multimedia data (figure 4 and column 5, lines 3-7 of Sugiyama).

Sugiyama does not disclose expressly that the printable representation is formatted in a first format responsive to the peripheral device being a first type of peripheral device, and the printable representation is formatted in a second format responsive to the peripheral device being a second type of peripheral device, the second format different from the first format.

Mastie discloses a printable representation formatted in a first format responsive to the peripheral device being a first type of peripheral device, and a printable representation formatted in a second format responsive to the peripheral device being a second type of peripheral device, the second format different from the first format (column 7, line 64 to column 8, line 6 of Mastie – *different formats used depending on print attribute values of printer*).

Sugiyama and Mastie are combinable because they are from the same field of endeavor, namely control and processing of document printing and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use different formats for printing depending on the type of printer connected as a peripheral device. Different printers use different default formats depending on the attributes and capabilities of each printer. Thus, one of ordinary skill in the art at the time of the invention would naturally use a first format for a first type of printer and a second format for a second

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type of printer since such would be needed for the proper functioning of the printers. Further, it would be obvious to use multiple different printers since different printers have different capabilities. For example, a user may wish to have a color inkjet for printing digital photographs onto photo printing paper and a black & white laser jet printer for printing documents. The color inkjet printer would provide superior results for photographs while the black & white laserjet printer would provide superior results for documents. Therefore, it would have been obvious to combine Mastie with Sugiyama to obtain the invention as specified in claim 35.

**Regarding claims 23 and 43:** Sugiyama discloses that the media source comprises a video camcorder (column 3, lines 12-15 of Sugiyama).

**Regarding claims 26 and 46:** Sugiyama discloses that the multimedia data comprises a video stream (column 3, lines 11-26 of Sugiyama).

**Regarding claims 27 and 47:** Sugiyama discloses that determining the printable representation of the multimedia data (column 5, lines 7-11 of Sugiyama) comprises extracting a key frame from the video stream (column 3, lines 20-29 of Sugiyama).

**5. Claims 4-5, 10, 36-37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Wendelken (US Patent 6,193,658 B1).**

**Regarding claims 4 and 36:** The combination of Sugiyama and Mastie does not disclose expressly that the electronic output is stored on a media recorder.

Wendelken discloses storing an electronic output on a media recorder (column 6, lines 32-34 of Wendelken).

The combination of Sugiyama and Mastie is combinable with Wendelken because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to store the electronic output on a media recorder, as taught by Wendelken. The motivation for doing so would have been to be able to keep a permanent record of the video image data (column 6, lines 32-34 of Wendelken). Therefore, it would have been obvious to combine Wendelken with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 4 and 36.

**Regarding claims 5 and 37:** The combination of Sugiyama and Mastie does not disclose expressly that the electronic output is stored on a removable storage device.

Wendelken discloses storing an electronic output on a removable storage device (column 6, lines 32-34 of Wendelken). Video tapes and optical discs are clearly removable storage devices.

The combination of Sugiyama and Mastie is combinable with Wendelken because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to store the electronic output on a removable storage device, as taught by Wendelken. The motivation for doing so would have been to be able to keep a permanent record of the video image data (column 6, lines 32-34 of Wendelken). Further, as is well-known in the art, using a *removable* storage device allows a user to switch recording devices, thus increasing the overall amount of data that can be stored and archived. Therefore, it would have been obvious to combine Wendelken with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 5 and 37.

**Regarding claims 10 and 41:** The combination of Sugiyama and Mastie does not disclose expressly that at least one of the first format and second format comprises a video paper.

Wendelken discloses generating a printed output on video paper (column 6, lines 32-34 of Wendelken).

The combination of Sugiyama and Mastie is combinable with Wendelken because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use video paper for the output print, as taught by Wendelken. The motivation for doing so would have been that video paper is one of several useful means for generating a permanent record of video image data (column 6, lines 32-34 of Wendelken). Therefore, it would have been obvious to combine Wendelken with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 10 and 41.

**6. Claims 6 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), Wendelken (US Patent 6,193,658 B1), Hymel (US Patent Application Publication 2003/0220988 A1), and Shieh (US Patent Application Publication 2002/0185533 A1).**

**Further regarding claims 6 and 38:** Wendelken discloses that said removable storage device (taught by Wendelken in the arguments regarding claims 6 and 44 above) is selected from one of a video tape and an optical disc (column 6, lines 32-34 of Wendelken).

The combination of Sugiyama, Mastie and Wendelken does not disclose expressly that the optical disc can specifically be either a DVD or a CD-ROM. Thus, Wendelken does not disclose expressly that

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the group from which said removable storage device is selected consists of not only a video tape, but also a DVD, a CD-ROM, an audio cassette tape, a flash card, a memory stick, and a computer disk.

Hymel discloses a removable storage device selected from among a video tape (as is well-known in the art, a digital camcorder uses a digital video (DV) cassette tape) (para. 10, lines 14-15 and line 20 of Hymel), a DVD (para. 10, lines 14-15 and lines 20-21 of Hymel), a CD-ROM (para. 10, lines 14-15 and lines 19-20 of Hymel), an audio cassette tape (audio cassette tape reader is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), and a computer disk (para. 19, lines 8-9 of Hymel).

The combination of Sugiyama, Mastie and Wendelken is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a video cassette tape, a DVD, a CD-ROM, an audio cassette tape, and a computer disk. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with the combination of Sugiyama, Mastie and Wendelken.

The combination of Sugiyama, Mastie, Wendelken and Hymel does not disclose expressly that said group consists not only of a DVD, a CD-ROM, an audio cassette tape, a video tape, and a computer disk, but also a flash card and a memory stick.

Shieh discloses removable storage devices including a flash card (para. 18, lines 1-5 of Shieh) and a memory stick (para. 18, lines 9-10 of Shieh).

The combination of Sugiyama, Mastie, Wendelken and Hymel is combinable with Shieh because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a flash card and a memory stick, as taught by Shieh. The motivation for doing so would have been to allow the user to output data to one of a plurality of different output devices, depending upon user need and desire (para. 18, lines 3-10 of Shieh). Therefore, it would have been obvious to combine Shieh with the combination of Sugiyama, Mastie, Wendelken and Hymel to obtain the invention as specified in claims 6 and 38.



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**7. Claims 7, 29, 39 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Huberman (US Patent 6,115,718).**

**Regarding claims 7 and 39:** The combination of Sugiyama and Mastie does not disclose expressly that the electronic output comprises a web page.

Huberman discloses generating a web page as an electronic output of multimedia data (column 3, lines 30-38 of Huberman). For a web page to exist with multimedia data (column 3, lines 30-38 of Huberman), it is inherent that said web page is generated. Otherwise, said web page would not exist.

The combination of Sugiyama and Mastie is combinable with Huberman because they are from similar problem solving areas, namely the control, storage and output of digital media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to generate a web page as an electronic output of multimedia data, as taught by Huberman. The suggestion for doing so would have been that storing data on the world wide web allows a company, educational institution, or other entity to publicly store and allow others to access digital data. Therefore, it would have been obvious to combine Huberman with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 7 and 39.

**Regarding claims 29 and 49:** The combination of Sugiyama and Mastie does not disclose expressly generating a web page representation of the multimedia data.

Huberman discloses generating a web page representation of multimedia data (column 3, lines 30-38 of Huberman). For a web page to exist with multimedia data (column 3, lines 30-38 of Huberman), it is inherent that said web page is generated. Otherwise, said web page would not exist.

The combination of Sugiyama and Mastie is combinable with Huberman because they are from similar problem solving areas, namely the control, storage and output of digital media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to generate a web page representation of the multimedia data, as taught by Huberman. The suggestion for doing so would have been that storing data on the world wide web allows a company, educational institution, or other entity to publicly store and allow others to access digital data. Therefore, it would have been obvious to combine Huberman with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 29 and 49.

**8. Claims 11, 13-14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Shieh (US Patent Application Publication 2002/0185533 A1).**

**Regarding claim 11:** The combination of Sugiyama and Mastie does not disclose expressly that the interface comprises a parallel port.

Shieh discloses as part of the background an input interface that comprises a parallel port (para. 5, lines 7-8 of Shieh).

The combination of Sugiyama and Mastie is combinable with Shieh because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a parallel port for inputting the video data at said interface. The motivation for doing so would have been that parallel ports are compatible with flash card readers and the older 12 Mbit/sec computer equipment (para. 5, lines 1-9 of Shieh). Thus, using a parallel port is useful if older video and/or computer equipment is being used. Therefore, it would have been obvious to combine Shieh with the combination of Sugiyama and Mastie to obtain the invention as specified in claim 11.

**Regarding claims 13-14:** The combination of Sugiyama and Mastie does not disclose expressly that the interface comprises a serial interface, wherein the serial interface is an USB interface.

Shieh discloses an interface comprising a serial interface, wherein the serial interface is an USB interface (figure 2 and para. 17, lines 12-15 of Shieh).

The combination of Sugiyama and Mastie is combinable with Shieh because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a USB interface for inputting the video data at the interface. The motivation for doing so would have been to provide an increased data transfer rate, as compared with the older types of data transfer ports (para. 5, lines 7-12 of Shieh). Therefore, it would have been obvious to combine Shieh with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 13-14.

**Regarding claim 20:** The combination of Sugiyama and Mastie does not disclose expressly that the interface comprises a removable storage reader.

Shieh discloses an interface comprising a removable storage reader (para. 17, lines 1-3 of Shieh).

The combination of Sugiyama and Mastie is combinable with Shieh because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a removable storage reader as part

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of the interface, as taught by Shieh. The suggestion for doing so would have been that flash memory is applicable to various digital products (para. 5, lines 12-14 of Shieh). Therefore, it would have been obvious to combine Shieh with the combination of Sugiyama and Mastie to obtain the invention as specified in claim 20.

**9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Stevens (US Patent Application Publication 2002/0010641 A1).**

**Regarding claim 12:** The combination of Sugiyama and Mastie does not disclose expressly that the interface comprises a wireless communication interface.

Stevens discloses an video data interface comprising a wireless communication interface (figure 3 (110) and para. 36, lines 1-8 of Stevens).

The combination of Sugiyama and Mastie is combinable with Stevens because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a wireless communication interface as said interface, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with the combination of Sugiyama and Mastie to obtain the invention as specified in claim 12.

**10. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Leman (US Patent 5,436,792).**

**Regarding claims 15-16:** The combination of Sugiyama and Mastie does not disclose expressly that the interface comprises a docking station that is built into the system.

Leman discloses a docking station (column 3, lines 31-38 of Leman) that is built into the system (column 5, lines 53-61 of Leman).

The combination of Sugiyama and Mastie is combinable with Leman because they are from similar problem solving areas, namely the control of digital data output and flow. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a docking station built into the system, as taught by Leman, as part of the interface taught by Sugiyama. The motivation for doing so would have been that a docking station provides ease of connection and disconnection with external devices and peripherals (column 2, lines 6-11 of Leman). Therefore, it would have been obvious

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to combine Leman with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 15-16.

**11. Claims 17, 22, 24, 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Hymel (US Patent Application Publication 2003/0220988 A1).**

**Regarding claim 17:** The combination of Sugiyama and Mastie does not disclose expressly that the interface comprises an optical port.

Hymel discloses an interface that comprises an optical (infrared) port (para. 10, lines 13-14 of Hymel).

The combination of Sugiyama and Mastie is combinable with Hymel because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use an optical port as part of said interface. The suggestion for doing so would have been that an optical port is one of many types of useful data ports for transferring digital data (para. 10, lines 3-14 of Hymel). Therefore, it would have been obvious to combine Hymel with the combination of Sugiyama and Mastie to obtain the invention as specified in claim 17.

**Regarding claims 22 and 42:** The combination of Sugiyama and Mastie does not disclose expressly that the media source comprises a cellular phone.

Hymel discloses a media source comprising a cellular phone (para. 10, lines 3-5 and lines 14-15 of Hymel).

The combination of Sugiyama and Mastie is combinable with Hymel because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a cellular phone as the media source. The suggestion for doing so would have been that a cellular phone is one of many types of useful media data input devices that can be used (para. 10, lines 14-22 of Hymel). Therefore, it would have been obvious to combine Hymel with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 22 and 42.

**Regarding claims 24 and 44:** The combination of Sugiyama and Mastie does not disclose expressly that the media source comprises a digital audio recorder.

Hymel discloses a media source comprising a digital audio recorder (para. 10, lines 14-15 and line 19 of Hymel).

The combination of Sugiyama and Mastie is combinable with Hymel because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a digital audio recorder as the media source. The motivation for doing so would have been to allow a user to connect another one of a variety of different types of peripheral devices, thus allowing the user to perform one more of a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 24 and 44.

**12. Claims 19, 31-32 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Dygert (US Patent Application Publication 2002/0048224 A1).**

**Regarding claim 19:** Sugiyama discloses that the interface comprises a port for connecting to the peripheral device, the port selected from a group including composite video (luminance and chrominance signals) (column 3, lines 16-20 of Sugiyama) and component video (NTSC) (column 3, lines 12-14 of Sugiyama).

The combination of Sugiyama and Mastie does not disclose expressly that said group consists of not only composite video and component video, but also of SCSI, IDE, RJ11 and S-video.

Dygert discloses a port for connecting a peripheral device selected from one of SCSI (para. 50, lines 1-5 of Dygert), IDE (para. 50, lines 1-5 of Dygert), RJ11 (para. 27, lines 6-9 of Dygert) and S-video (para. 50, lines 9-15 of Dygert).

The combination of Sugiyama and Mastie is combinable with Dygert because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to be able to further select between SCSI, IDE, RJ11 and S-video ports. The suggestion for doing so would have been that said ports are among some of the many available types of ports for transferring time-based multimedia data (para. 27, lines 3-9 and para. 50, lines 1-6 of Dygert). Therefore, it would have been obvious to combine Dygert with the combination of Sugiyama and Mastie to obtain the invention as specified in claim 19.

**Regarding claims 31 and 50:** The combination of Sugiyama and Mastie does not disclose expressly that the multimedia processing system is configured to control functionality in the peripheral device.

Dygart discloses a multimedia processing system (figure 1(10) of Dygart) that controls functionality of the media source (para. 44, lines 1-15 of Dygart).

The combination of Sugiyama and Mastie is combinable with Dygart because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the multimedia processing system communicatively interact with the media source, as taught by Dygart. The motivation for doing so would have been to be able to access a large, remote recording database (para. 11, lines 1-4 of Dygart) instead of having to store the entire digital media collection locally. Therefore, it would have been obvious to combine Dygart with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 31 and 50.

**Regarding claim 32:** The combination of Sugiyama and Mastie does not disclose expressly that the multimedia processing system resides at least in part on the peripheral device.

Dygart discloses performing multimedia processing operations on the peripheral device (para. 44, lines 7-9 and lines 12-15 of Dygart). Thus, the multimedia processing system resides at least in part on the peripheral device.

The combination of Sugiyama and Mastie is combinable with Dygart because they are from the same field of endeavor, namely the control, processing and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to operate the multimedia processing system at least partly on the peripheral device, as taught by Dygart. The motivation for doing so would have been to be able to access a large, remote recording database (para. 11, lines 1-4 of Dygart) instead of having to store the entire digital media collection locally. Therefore, it would have been obvious to combine Dygart with the combination of Sugiyama and Mastie to obtain the invention as specified in claim 32.

**13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), Shieh (US Patent Application Publication 2002/0185533 A1), Hymel (US Patent Application Publication 2003/0220988 A1), and Gerber (US Patent 5,568,406).**

**Further regarding claim 21:** Shieh discloses that the removable storage reader comprises a media reader selected from a group, wherein two of said group is a flash card reader (para. 16, lines 1-3 of Shieh) and a memory stick reader (para. 18, lines 9-10 of Shieh).

The combination of Sugiyama, Mastie and Shieh does not disclose expressly that said group consists of not only a flash card reader, and a memory stick reader, but also a DVD reader, a CD reader, a computer disk reader, and an SD reader.

Hymel discloses a removable storage reader selected from among a DVD reader (para. 10, lines 14-15 and lines 20-21 of Hymel), a CD reader (para. 10, lines 14-15 and lines 19-20 of Hymel), and a computer disk reader (para. 19, lines 8-9 of Hymel).

The combination of Sugiyama, Mastie and Shieh is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a DVD reader, a CD reader, and a computer disk reader, as taught by Hymel. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with the combination of Sugiyama, Mastie and Shieh.

The combination of Sugiyama, Mastie, Shieh and Hymel does not disclose expressly that said group consists not only of a DVD reader, a flash card reader, a memory stick reader, a CD reader, and a computer disk reader, but also of an SD reader.

Gerber discloses storing digital data on an SD disk (column 10, lines 28-34 of Gerber).

The combination of Sugiyama, Mastie, Shieh and Hymel is combinable with Gerber because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection an SD disk. The motivation for doing so would have been that an SD disk is useful for backing up large amounts of digital data (column 10, lines 23-34 of Gerber). Therefore, it would have been obvious to combine Gerber with the combination of Sugiyama, Mastie, Shieh and Hymel to obtain the invention as specified in claim 21.

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**14. Claims 25 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), Shieh (US Patent Application Publication 2002/0185533 A1), Hymel (US Patent Application Publication 2003/0220988 A1), and Heilweil (US Patent 4,881,135).**

**Regarding claims 25 and 45:** Sugiyama discloses that the media source comprises a media input selected from a group of a video cassette tape reader (column 3, lines 12-15 of Sugiyama), and a video capture device (column 3, lines 12-15 of Sugiyama).

The combination of Sugiyama and Mastie does not disclose expressly that said group consists not only of a video cassette tape reader and a video capture device, but also of a DVD reader, a CD reader, an audio cassette tape reader, a flash card reader, a digital video recorder, and a meeting recorder.

Shieh discloses inputting digital media using a flash card reader (para. 16, lines 1-3 of Shieh).

The combination of Sugiyama and Mastie is combinable with Shieh because they are from similar problem solving areas, namely the control and storage of digital media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a flash card reader, as taught by Shieh. The motivation for doing so would have been to allow the user to input data to one of a plurality of different input devices, depending upon user need and desire (para. 18, lines 3-10 of Shieh). Therefore, it would have been obvious to combine Shieh with the combination of Sugiyama and Mastie.

The combination of Sugiyama, Mastie and Shieh does not disclose expressly that said group consists not only of a video cassette tape reader, a video capture device, and a flash card reader, but also of a DVD reader, a CD reader, an audio cassette tape reader, a digital video recorder, and a meeting recorder.

Hymel discloses a media input device selected from among a DVD reader (para. 10, lines 14-15 and lines 20-21 of Hymel), a CD reader (para. 10, lines 14-15 and lines 19-20 of Hymel), an audio cassette tape reader (audio cassette tape reader is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), and a digital video recorder (para. 10, lines 14-15 and line 20 of Hymel).

The combination of Sugiyama, Mastie and Shieh is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a DVD reader, a CD reader, an audio cassette tape reader, and a digital video recorder, as taught by Hymel. The motivation for doing so would have been to allow a user to connect a variety of different



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types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with the combination of Sugiyama, Mastie and Shieh.

The combination of Sugiyama, Mastie, Shieh and Hymel does not disclose expressly that said group consists not only of a DVD reader, a CD reader, an audio cassette tape reader, a video cassette tape reader, a video capture device, a flash card reader, and a digital video recorder, but also of a meeting recorder.

Heilweil discloses media input using a meeting recorder (figure 2 and column 3, lines 48-51 of Heilweil).

The combination of Sugiyama, Mastie, Shieh and Hymel is combinable with Heilweil because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection the meeting recorder taught by Heilweil. The motivation for doing so would have been to provide audio-visual data regarding a conference or a meeting in a concealed or discreet manner (column 2, lines 33-40 of Heilweil). Therefore, it would have been obvious to combine Heilweil with the combination of Sugiyama, Mastie, Shieh and Hymel to obtain the invention as specified in claims 25 and 45.

**15. Claims 33-34, 51-52 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Schroath (US Patent Application Publication 2002/0169849).**

**Regarding claims 33 and 51:** The combination of Sugiyama and Mastie does not disclose expressly that the system is configured to automatically detect a communicative coupling of the peripheral device.

Schroath discloses automatically detecting a communicative coupling of a peripheral device (para. 38, lines 14-18 of Schroath).

The combination of Sugiyama and Mastie is combinable with Schroath because they are from the same field of endeavor, namely the control, storage and output of digital media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the system taught by Sugiyama to automatically detect a communicative coupling of the peripheral device, as taught by Schroath. The motivation for doing so would have been that, by using an automatic detection, digital data can be downloaded without querying the user (para. 38, lines 14-18 of Schroath), thus providing

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greater convenience for the user and faster downloads for required digital data. Therefore, it would have been obvious to combine Schroath with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 33 and 51.

**Regarding claims 34 and 52:** The combination of Sugiyama and Mastie does not disclose expressly that the system is configured to automatically download multimedia data from the peripheral device.

Schroath discloses automatically downloading digital data from a peripheral device (para. 38, lines 14-18 of Schroath).

The combination of Sugiyama and Mastie is combinable with Schroath because they are from the same field of endeavor, namely the control, storage and output of digital media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the system taught by Sugiyama to automatically download digital data from the peripheral device, as taught by Schroath, wherein said digital data is the multimedia data taught by Sugiyama. The motivation for doing so would have been that automatically downloading digital data without querying the user (para. 38, lines 14-18 of Schroath) provides greater convenience for the user and faster downloads for required digital data. Therefore, it would have been obvious to combine Schroath with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 34 and 52.

**Regarding claim 59:** The combination of Sugiyama and Mastie does not disclose expressly a communication module for sending a request to the peripheral device for the multimedia data to be downloaded via the interface.

Schroath discloses a communication module for sending a request to a peripheral device for digital data to be downloaded via an interface (para. 38, lines 6-23 of Schroath).

The combination of Sugiyama and Mastie is combinable with Schroath because they are from the same field of endeavor, namely the control, storage and output of digital media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the system taught by Sugiyama to download digital data from a peripheral device via an interface, as taught by Schroath, wherein said digital data is the multimedia data taught by Sugiyama. The motivation for doing so would have been to provide a convenient means to communicate and obtain desired digital data (para. 38, lines 14-18 of Schroath). Therefore, it would have been obvious to combine Schroath with the combination of Sugiyama and Mastie to obtain the invention as specified in claim 59.

**16. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Steele (US Patent 5,884,056).**

**Regarding claim 57:** The combination of Sugiyama and Mastie does not disclose expressly calculating a difference measure between successive frames of the video streams and determining that a frame is a key frame if the difference measure exceeds a predetermined threshold.

Steele discloses calculating a difference measure between successive frames of the video streams and determining that a frame is a key frame if the difference measure exceeds a predetermined threshold (column 7, lines 4-19 and lines 41-43 of Steele).

The combination of Sugiyama and Mastie is combinable with Steele because they are from the same field of endeavor, namely the control, organization and output of digital multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the differencing and thresholding taught by Steele to determine the key frames taught by Sugiyama. The motivation for doing so would have been that the difference thresholding scheme of Steele provides the manner in which the scenes are separated, and has reduced sensitivity to artifacts, such as illumination differences, that do not generally signal a new scene (column 7, lines 1-3 of Steele), and is thus an effective and robust method of scene segmentation. Therefore, it would have been obvious to combine Steele with the combination of Sugiyama and Mastie to obtain the invention as specified in claim 57.

**17. Claims 28, 48, 53, 58 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), and Hoda (USPN 4,831,610).**

**Regarding claims 58 and 60:** Sugiyama discloses that the multimedia processing system extracts a segment of the multimedia data (column 3, lines 41-48 of Sugiyama – *selected frames are extracted from the video data*).

The combination of Sugiyama and Mastie does not disclose expressly that the multimedia processing system generates a machine readable code identifying the extracted segment of the multimedia data, and printing the machine readable code to the printable tangible medium together with the printable representation of the multimedia data.

Hoda discloses generating a machine readable code identifying the extracted segment of the multimedia data, and wherein the first output device further prints the machine readable code to the printable tangible medium together with the printable representation of the multimedia data (figure 2 and column 5, lines 10-16 of Hoda).

The combination of Sugiyama and Mastie is combinable with Hoda because, namely the control, output and printing of multimedia data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to generate and output machine-readable code which identifies the extracted segment of multimedia data, as taught by Hoda. Thus, by combining the relied upon teachings of Hoda with Sugiyama, the first output device would print the machine-readable code to the printable tangible medium. The motivation for doing so would have been to provide a system in which the video data, displayed as sample frames on the printed output, can be readily accessed and played back by a user with minimal trouble (column 1, line 51 to column 2, line 2 of Hoda). Therefore, it would have been obvious to combine Hoda with the combination of Sugiyama and Mastie to obtain the invention as specified in claims 58 and 60.

**Further regarding claims 28 and 48:** Hoda discloses that the machine-readable code is a bar code (figure 2(18) and column 5, lines 10-12 of Hoda).

**Further regarding claim 53:** Hoda discloses that the processing system instructs the peripheral device to play the extracted segment of the multimedia data identified by the machine-readable code responsive to a user controlling the peripheral device to capture an image of the machine-readable code from the printed machine-readable code (column 5, lines 10-26 and column 6, lines 8-19 of Hoda).

**18. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723), Mastie (US Patent 6,515,756 B1), Hoda (USPN 4,831,610), and Jun (US PGPub 2002/0051010 A1).**

**Regarding claim 56:** The combination of Sugiyama, Mastie and Hoda does not disclose expressly that the printable representation comprises an image of an individual, and wherein determining the printable representation of the extracted segment comprises: identifying the individual in the video stream; and locating each frame of the video stream including the individual.

Jun discloses extracting a video segment (scene segmentation) according to the image of an individual, wherein determining the representation of the extracted segment comprises identifying the individual in the video stream; and locating each frame of the video stream including the individual (para. 9, lines 3-9; para. 13; and para. 44 of Jun – *shot segmentation performed [para. 44], can be done according to person in scene [para. 9, lines 3-9] which is one problem obviated by invention disclosed in Jun [para. 13]*).

The combination of Sugiyama, Mastie and Hoda is combinable with Jun because they are from the same field of endeavor, namely the control, organization and output of digital multimedia data. At the

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time of the invention, it would have been obvious to a person of ordinary skill in the art to organize the extracted video segments according to a particular individual in the scene, as taught by Jun. Thus, the printable representation of the extracted segment (taught by Sugiyama) would comprise an image of an individual, as taught by Jun. The suggestion for doing so would have been that users sometimes only want scenes in which a particular person appears (para. 9, lines 3-4 of Jun). Therefore, it would have been obvious to combine Jun with the combination of Sugiyama, Mastic and Hoda to obtain the invention as specified in claim 56.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. THOMPSON whose telephone number is (571)272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/James A Thompson/  
Examiner, Art Unit 2625

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